Overview of SYBAC Meeting – 11/10/15

All SYBAC Students were present:

Caleb Beerbower, Southeast Polk HS
Brent Brain, Muscatine
Kaylee Daniels, Oskaloosa HS
Gabe Golberg, Mount Vernon HS
Austin Kallemeyn, Sioux Center Community HS
Stephanie Lapointe, Newman Catholic HS
Aaron Mark, Burlington HS
Zach Mass, Treynor Community HS
Bryce Snell, Ballard HS
Brookelyn Wahlert, CAM HS
Hunter Werner, Louisa-Muscatine Jr./Sr. Schools

<u>Discussion:</u> Brookelyn Wahlert chaired the student-led discussions.

Interactive student conservations:

- How is technology/broadband going to affect your future job?
 - o In International law, video conferencing will be used.
 - Organizations utilize satellite, video conferencing, broadband, voice-over-IP to communicate.
 - Airline pilot As one sees advances in technology, you will also have advances in safety.
 - o Radio to run the technology, we need to use the Internet.
 - Software Engineering evolves around internet usage and technology.
- Competition deficiency with Internet connectivity in schools
 - Potential grants for new companies. Infrastructure for the Internet is expensive.
 Grants could help out smaller companies.
 - 2015 legislation in the State of Iowa <u>HF 655</u> The State of Iowa's Office of the Chief Information Officer could offer tax relief to companies who built broadband where there isn't connectivity. They coordinated the structure, but there wasn't any funding appropriated.
 - The competition piece is really tough. Some companies like competition and others don't. How do you feel about competition?
 - Capitalism relies on competition. The public is relying on the companies to provide the best service. If there is no competition, companies can just do what they want. For broadband it helps keep the price low and the service up.
- Anyone heard about FirstNet? http://firstnet.gov/
 - Vision: To provide emergency responders with the first high-speed, wireless nationwide public safety broadband network.
 - Ric Lumbard is the Chair of Iowa's FirstNet Broadband Subcommittee
 - If everyone would be at the same location at the same time and picked up their cell phones and went off-hook, at some point the commercial network would stop. Police department and first responders have been dependent on cell phones; they need to purchase the same cell service like the public does. When the public is on their cell phone calling home, because of a disaster; the cell network goes down and public safety can't use it. FirstNet is a private public safety broadband network that operates in its own frequency range.
 - Commercial broadband and public safety broadband will be built differently.
 - With FirstNet, can the public connect to it to help public safety?
 Nope, it is a private network only for first responders to communicate.

- How do first responders connect to broadband right now? FirstNet is a cell network/carrier (Band 14) with a certain number of users and certain number of devices.
- Google Glasses: Should we continue to try to improve or is it too futuristic?
 - A lot of what is happening right now is needless inventions, and we are not perfecting the things that we make. Maybe it is better to wait and go back to the drawing board in a few years.
 - It is a good idea to keep upgrading the things we have. There is a lot of room for innovation in augmented reality (virtual information laced within live reality).
 - Augmented reality has possibilities in therapy, healthcare, law enforcement, engineering, and designing.
 - Discussions about: Microsoft HoloLens, Mechdyne http://www.mechdyne.com/
 - How would augmented reality interact with the human?
 - Right now it would be a goggle or headset, but in the future it could be a contact lens, ear piece, or glove.
 - Haptic feedback the use of the sense of touch in a user interface design to provide information to an end user.
 - Does this open up privacy concerns?
 - If we go to someone's Facebook page we can learn anything.
 - There would be restrictions. People can turn different privacy settings on and off.
 - If you over restrict, then there will be other problems.
 - Human Principal: If I take something away from you, it will cause you stress. If you cause stress, a criminal element will take off.
- Should there be more classes on cyber security?
 - o It should be common sense. If you don't do it in real life, then don't do it online.
 - Oskaloosa high school students have had more cyber security speeches than middle school students.
 - Discussed the following article: New research: Comparing how security experts and non-experts stay safe online https://googleonlinesecurity.blogspot.com/2015/07/new-research-comparing-how-security.html
 - Young adults are getting credit cards. It is getting easier for people to hack.
 More security may be needed.
 - Healthcare information is the hottest commodity in the cyber world. It is no longer just financial information.
 - Discussed ransom hacks Hackers ramp up computer attacks that demand 'ransom'.

Satellite broadband in vehicles

- Could be lifesaving and helpful as a secondary source of contact.
- There are free internet options in stores. It might have a negative side in cars because of distractions.
 - Smaller towns' restaurants don't have local Wi-Fi connection.
- Some school buses now have Wi-Fi access.
 - Oskaloosa can't have technology 'viewable' on their buses. Safety concern.

Next meeting Aaron Mark will lead the discussion. Everyone's input is highly valuable.